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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,897	01/17/2002	Eric V. Erickson	01-199	7942
20306	7590	05/01/2006	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			ABELSON, RONALD B	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			2616	

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,897

Applicant(s)

ERICKSON, ERIC V.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/27/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Claim Objections

1. Claim 13 is objected to because of the following informalities: "channels" on line 3 should be changed to "channel resource devices". Appropriate correction is required.

Claim 21 is objected to because of the following informalities: "channel" on line 2 should be changed to "channel resource device". Appropriate correction is required.

Claim 22 is objected to because of the following informalities: "channel" on line 2 should be changed to "channel resource device". Appropriate correction is required.

Claim 22 is objected to because of the following informalities: "claim1" on line 1 should be changed to "claim 1". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-10, and 12-22 are rejected under 35

U.S.C. 102(e) as being anticipated by Matrangi (US 6,977,899).

Regarding claim 1, Matrangi teaches a method for evaluating and selecting channel resource devices (fig. 4).

Matrangi teaches providing a communication platform comprising a plurality of channel resource devices, in which said channel resources operate to establish call connections (fig. 1 boxes 120-1 - 120-N, col. 3 lines 40-43, setup, col. 1 lines 33-35).

Matrangi teaches receiving connection outcome results of previous call connections handled by the channel resource devices wherein the connection outcome results are indicative of channel resource device failures (fig. 3, fig. 4 box 430, 440, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34). The examiner corresponds the applicant's device failures with the call processor selecting an alternate call processor and not setting up the connection.

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Matragi teaches generating a statistical analysis based at least in part, on the connection outcome results (overload control analysis table, ordered list, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34).

Matragi teaches assigning an incoming call to at least one channel resource device of the plurality of channel resource devices, said at least one channel resource device selected at least in part, in response to the statistical analysis (overload control analysis table, ordered list, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34).

Regarding claim 16, Matragi teaches a channel evaluator operable to generate a statistical analysis based at least in part, on the connection outcome results (overload control analysis table, ordered list, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34).

Matragi teaches a storage buffer for storing the connection outcome results (fig. 2 box 220, col. 4 lines 50-54).

Matragi teaches a call router for routing incoming calls to the channel resource devices selected in response to the

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statistical analysis (fig. 1 box 120-1 - 120-N, overload control analysis table, ordered list, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34). Note, the call processors can be thought of as routers since, if a call processor is overloaded, it will route the call to an alternate call processor.

Regarding claim 2, a preferred channel resource device is one which successfully connects calls, and wherein the step of assigning the incoming call to the channel resource device, comprises assigning the incoming call to the preferred channel resource device (identify call processor not overloaded, col. 6 lines 1-9). Examiner corresponds applicant's preferred channel resource device with reference's call processor not overloaded.

Regarding claim 3, a non-preferred channel resource device is one which fails to connect calls, and wherein the step of assigning the incoming call to the channel resource device, comprises to not assign the incoming call to the non-preferred channel (identify call processor not overloaded, col. 6 lines 1-9). Examiner corresponds applicant's non-preferred channel resource device with reference's overloaded call processor.

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Regarding claim 4, storing the connection outcome results in a buffer, the step of storing being performed after the step of receiving connection results from the previous call connections (fig. 2 box 220, col. 4 lines 50-54).

Regarding claim 6, the statistical analysis is a no weighting method (fig. 4 box 440, col. 6 lines 5-9).

Regarding claim 7, the statistical analysis is a time-weighting method (fig. 3 box 355, col. 5 lines 25-28).

Regarding claim 8, wherein the statistical analysis is an asymmetrical weighing wherein success receives one value, and failure receives another value (identify call processor not overloaded, col. 6 lines 1-9).

Regarding claim 9, classifying the channel resource device based at least in part, on the statistical analysis (identify call processor not overloaded, col. 6 lines 1-9).

Regarding claim 10, a preferred channel becoming non-preferred due to a failed call connect attempt on the preferred

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channel, and a non-preferred channel becoming preferred due to a successful call connect attempt on the non-preferred channel (fig. 3, table 300 is maintained by each call processor). Given the table is maintained, then it is updated.

Regarding claim 12, determining which channel resource devices are not currently in use (identify the next call processor in the ordered list not overloaded, col. 6 lines 5-9). Note, if a call resource device were not currently in use, then it would be identified as 'not overloaded'.

Regarding claim 13, assigning the incoming call to the channel resource device based, at least in part on which channels are currently not in use (identify the next call processor in the ordered list not overloaded, col. 6 lines 5-9). Note, if a call resource device were not currently in use, then it would be identified as 'not overloaded'.

Regarding claim 14, assessing a failure to the channel resource device upon an unsuccessful call connection through the channel (fig. 3, table 300 is maintained by each call processor).

Regarding claim 15, reassigning the incoming call to a next preferred available channel (identify the next call processor in the ordered list not overloaded, col. 6 lines 5-9).

Regarding claim 17, channel evaluator classifies channel resource devices, at least in part on the statistical analysis generated from the previous call connect results (fig. 3, col. 5 lines 7-28).

Regarding claim 18, the channel evaluator determines which channels are available (fig. 3, fig. 4 box 430, 440, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34).

Regarding claim 19, the channel evaluator classifies channel resource devices, at least in part on the availability of channel resource devices (fig. 3, fig. 4 box 430, 440, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34).

Regarding claim 20, incoming calls are assigned to channels, and connected to the channels through the call router based at least in part, on the statistical analysis (fig. 3,

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fig. 4 box 430, 440, col. 6 lines 1-9, overload condition, selects an alternate call processor, col. 2 lines 30-34). Note, the call processors can be thought of as routers since, if a call processor is overloaded, it will route the call to an alternate call processor.

Regarding claim 21, the channel resource devices are channel processors (fig. 1 box 120-1 - 120-N).

Regarding claim 22, the channel resource devices are a plurality of ingress ports, egress ports, and channel resource device processors (fig. 1 box 120-1 - 120-N). Note, each channel resource device process (fig. 1 box 120-1 - 120-N) has at least one ingress and egress port.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Matragi as applied to claim 4 above, and further in view of McKee (US 6,810,343).

Matragi is silent on the buffer is a circular buffer.

McKee teaches a circular buffer (col. 3 lines 19-22).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Matragi by replacing the buffer (fig. 2 box 220) with a circular buffer. The suggestion for the modification is circular buffers allows for the storing of the most recently collected data by continuously overwriting the previously collected data (McKee: col. 3 lines 19-22). This enables an efficient use of buffer space.

6. Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Matragi as applied to claim 10 above, and further in view of Wang (US 5,280,630).

Matragi is silent on indicating to a user a change in channel resource device status

Wang teaches indicating to a user a change in status (list of channels in decreasing preference, handset would choose the first acceptable channel and identify to the base station the acceptable channel, col. 7 lines 37-42). Note, as shown in the

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passage above, the handset is informed of the currently allocated channels in decreasing preference.

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Matrangi by having the call processors inform the users when they become congested and when they are no longer congested. This modification can be performed in software. This modification would benefit the system by reducing the probability that a call processor will receive a call setup request and not be able to process the request.

7. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matrangi as applied to claim 10 above, and further in view of applicant's admitted prior art 'AAPA'.

Matrangi is silent on channel resource device failures being hardware (claim 23) or software (claim 24).

AAPA teaches channel resource device failures being hardware or software (pg. 3 lines 2-4).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Matrangi by storing in the routing table (fig. 3) whether the call processor failed due to a hardware/software error. This modification can be performed in software. This modification would (allow/enable/benefit) the

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system by not routing to a call processor if the call processor is currently inoperable due to a hardware/software failure.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

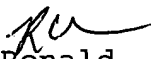
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald


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Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ronald Abelson
Examiner
Art Unit 2616


CHI PHAM
SUPERVISORY PATENT EXAMINER
4/20/06